

WHAT IS CLAIMED IS:

1. A method for pricing wireless communications services on a wireless network according to a selected transmission priority level, comprising the steps of:

(a) providing a selection of a plurality of priorities available for

5 transmitting a wireless communication transaction on a wireless network; and

(b) charging a user an amount for the wireless communication transaction

at a price corresponding to the priority to be selected,

wherein transactions of lower priority are temporarily discontinued in favor of higher priority transactions when network capacity reaches a predetermined level.

2. The method for pricing wireless communications services according to claim 1, wherein the wireless network is a cellular network, and the capacity level is determined locally according to a percentage of available access links into the network at a cell or sector.

3. The method for pricing wireless communications according to claim 1, wherein the selection of the plurality of priorities provided is predetermined by the network according to transaction type in order to maximize capacity on the wireless network according to the time sensitivity of the type of transaction.

4. The method for pricing wireless communications according to claim 3, wherein the selection of the plurality of priorities for speech communication transactions and e-mail transactions are predetermined such that speech communication transactions are of higher priority than e-mail transactions.

5 ✓ 5. The method for pricing wireless communications according to claim 3, wherein the selection of the plurality of priorities for speech communication transactions and file transfer transactions are predetermined such that speech communication transactions are of higher priority than file transfer transactions.

10 23 ✓ 6. The method for pricing wireless communications according to claim 3, wherein transactions that require greater bandwidth for operation are of higher priority than transactions that require only an available bit rate for operation.

15 24 ✓ 7. The method for pricing wireless communications according to claim 1, wherein a subscriber is provided access to the wireless network according to a subscriber plan, and the selection of the plurality of priorities provided is pre-selected by the subscriber, wherein the cost of the subscriber plan corresponds with availability for performing transactions of higher priority.

20 < 8. The method for pricing wireless communications according to claim 7, wherein a subscriber authorizes a user to use the wireless network according to the

subscriber plan, such that the subscriber can limit the user's access to the wireless network for high priority transactions.

✓9. The method for pricing wireless communications according to claim 1,
5 further comprising the step of providing a selection of a plurality of priorities available for each of a plurality of transaction types,

wherein the selections of the plurality of priorities are subsets of priorities that are pre-determined by the network and are pre-selected by the subscriber.

10 ✓10. The method for pricing wireless communications according to claim 1, wherein the wireless communication transaction is generated by a user application, and the selection of the plurality of priorities provided is pre-configured in the user application.

15 ✓11. The method for pricing wireless communications according to claim 10, wherein the selection of the plurality of priorities is a subset of priorities that are pre-configured in the user application and are authorized by the network.

12. The method for pricing wireless communications according to claim 1,
20 wherein a subscriber is provided access to the wireless network according to a subscriber plan in which the subscriber purchases an allotment of transaction

units, and the amount to be charged for the wireless communication transaction at the selected priority is a number of units from the allotment of transaction units.

13. The method for pricing wireless communications according to claim 12, wherein higher priority transactions are charged more units than lower priority transactions.

14. The method for pricing wireless communications according to claim 1, wherein the step of charging an amount for the wireless communication transaction occurs only at the conclusion of the transaction.

15. The method for pricing wireless communications according to claim 1, wherein the step of charging an amount for the wireless communication transaction occurs at intervals during the transmission of the transaction, at a rate corresponding to the selected priority.

16. The method for pricing wireless communications according to claim 15, wherein the step of charging an amount for the wireless communication only occurs during periods of time when the network has capacity for transactions at the selected priority.

17. The method for pricing wireless communications according to claim 1, further comprising the steps of:

(c) receiving a request to transmit a wireless communication transaction at a selected priority from the plurality of available priorities; and

5 (d) transmitting portions of the wireless communication transaction during periods of time when the network has capacity for transactions at the selected priority, until completion of the transaction.

10 18. The method for pricing wireless communications according to claim 17, further comprising the steps of:

(e) receiving a request to transmit the remainder of the wireless communication at a second selected priority from the plurality of available priorities;

15 (f) transmitting portions of the wireless communication transaction during periods of time when the network has capacity for transactions at the second selected priority, until completion of the transaction; and

(g) charging an amount for the remainder of the wireless communication transaction at a price corresponding to the second selected priority.

20 19. The method for pricing wireless communications according to claim 18, wherein the step of charging an amount for the wireless communication transaction occurs at intervals during the transmission of the transaction, such that the first

portion of the transaction occurs at a rate corresponding to the first selected priority, and the second portion of the transaction occurs at a rate corresponding to the second selected priority.

5 20. A method for pricing a wireless communication transaction on a wireless cellular network having a plurality of regional cells according to the capacity at a cell, comprising the steps of:

10 (a) evaluating the capacity of a cell to determine the accessibility to the cell for transmitting transactions at each of a plurality of priority levels, wherein each wireless communication transaction is associated with a priority level, and higher priority transactions are transmitted before lower priority transactions;

 (b) broadcasting an indication of the capacity of the cell to wireless communications devices operated within the cell;

15 (c) receiving a request from a wireless communications device to transmit a wireless communication transaction at a selected priority level from the plurality of priority levels, wherein the selected priority level is determined based upon the capacity of the cell broadcasted to the wireless communications device; and

20 (d) allocating capacity to the wireless communications device for transmission of the wireless communication transaction according to the selected priority,

 wherein the price of the wireless communication is determined according to the selected priority.

21. The method for pricing a wireless communication transaction according to claim 20, wherein the capacity of the cell is determined based upon an average amount of time required to transmit transactions at each priority level during a preceding time period.

22. The method for pricing a wireless communication transaction according to claim 20, wherein the wireless communications device indicates a preferable priority level for the transaction to a subscriber based upon the indicated capacity of the cell.

23. The method for pricing a wireless communication transaction according to claim 20, wherein the plurality of priority levels to be selected is predetermined by the network according to transaction type in order to maximize capacity on the wireless network according to the time sensitivity of the type of transaction.

24. The method for pricing wireless communications according to claim 23, wherein transactions that require greater bandwidth for operation are of higher priority than transactions that require only an available bit rate for operation.

29 25. The method for pricing wireless communications according to claim 20,
wherein a subscriber is provided access to the wireless network according to a
subscriber plan, wherein the cost of the subscriber plan corresponds with
availability for performing transactions of higher priority.

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26. The method for pricing wireless communications according to claim 25,
wherein the subscriber a subscriber authorizes a user to use the wireless network
according to the subscriber plan, such that the subscriber can limit the user's access
to the wireless network for high priority transactions.

27. A method for pricing the transmission of wireless communications
transactions generated on a wireless communications device according to a selected
transmission priority level, comprising the steps of:

(a) providing a selection of priorities available for transmitting wireless
communication transactions of a plurality of different types, wherein each type of
transaction is generated by a different user application operating on the wireless
communications device; and

(b) transmitting portions of wireless communication transactions
requested for transmission in the wireless communications device when the
network has capacity for transactions at the selected priorities,

wherein the prices of the wireless communications are determined according
to the period of time required for transmission of the transactions.

28. The method for pricing the transmission of wireless communications transactions according to claim 27, wherein transactions that require greater bandwidth for operation are of higher priority than transactions that require only an available bit rate for operation.

29. The method for pricing the transmission of wireless communications transactions according to claim 27, wherein the price of a wireless communication transaction is determined according to pro-rated rates when the priority selected is changed before the transmission of the transaction is completed.

30. A wireless communications system for allocating network access according to priorities designated for requested transactions of wireless communications, comprising:

- (a) a wireless network having a plurality of access links for transmitting transactions;
- (b) a plurality of wireless communications devices for requesting transmission of transactions on the wireless network, wherein a designated priority level is associated with each transaction;
- (c) an access control manager for scheduling transmission of transactions, when all of the plurality of access links are occupied; and

(d) a transaction records database connected to the access control manager for charging subscribers an amount for wireless communication transactions at a price corresponding to the priority selected for the transactions.

5 31. The wireless communications system according to claim 30, wherein the access control manager schedules the transmission of transactions by:

- i) identifying a transaction that is being transmitted over the wireless network and is of lower priority than a requested transaction;
- ii) discontinuing the transmission of the transaction of lower priority; and
- iii) authorizing the transmission of the requested transaction.

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